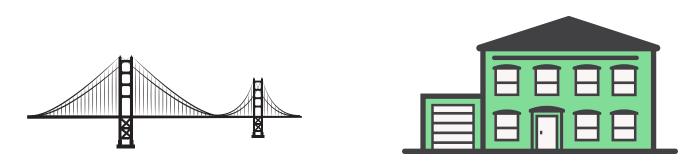


# Meghan the Mechanical Engineer: Industrial Magnets

#### **Meet Meghan!**





Hi! My name is Meghan. I'm a mechanical engineer. A mechanical engineer is a person who designs structures, like bridges or buildings.

## What I am Working On

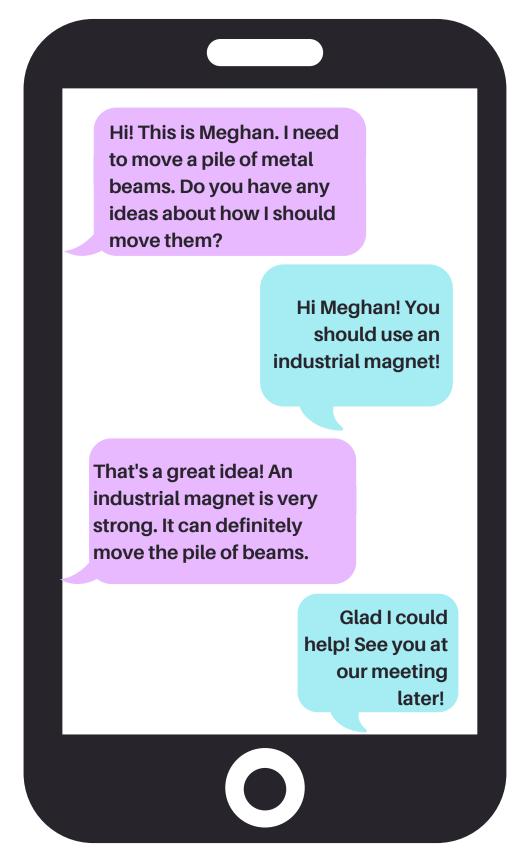




Today, I am building a new building. I need to move large metal beams to a construction site! The large beams are very heavy, and I cannot move them myself.

#### **Text Messages**

I need to find a way to move the metal beams. I am going to text my friend, Brian. He is a mechanical engineer and might have an idea!



## **Industrial and Regular Magnets**

Industrial magnets are special magnets. They are like all magnets because they can pick things up without even touching them. But, they are larger and stronger than regular magnets!

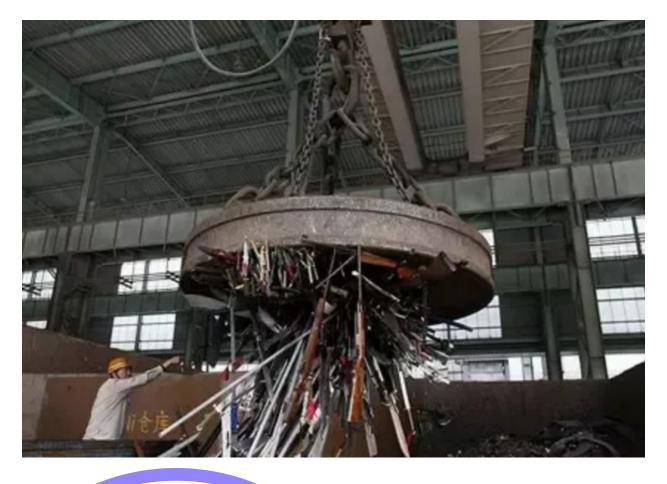


A regular magnet can pick up a small item, like a paper clip.

An industrial magnet can pick up large items, like a refrigerator or car!

# **Check Out This Industrial Magnet!**

#### This industrial magnet is picking up pieces of metal.



Did you know that industrial magnets can hold 15,000 pounds? That is the weight of a large elephant!

## **Moving the Metal Beams**

To move the metal beams, I am going to use an industrial magnet. First, I will place the industrial magnet over the pile of beams. The magnet will create a magnetic force. The magnetic force will pull on the metal beams without even touching them! When I move the magnet closer to the beams, the force will get even stronger! The industrial magnet will be strong enough to pick up the heavy pile of beams!



